

**BOARD OF ENVIRONMENTAL REVIEW**  
**AGENDA ITEM**  
**EXECUTIVE SUMMARY FOR**  
**WATER QUALITY STANDARDS ADMENDMENTS**

**AGENDA #III.B.2.**

**AGENDA ITEM SUMMARY**

The department requests that the Board approve its proposal to initiate rulemaking to adopt New Rules I and II and amend ARM 17.30.502, 17.30.516, 17.30.602, 17.30.607, 17.30.608, 17.30.610, 17.30.615, 17.30.619 through 17.30.629, 17.30.635, 17.30.641, 17.30.645, 17.30.650 through 17.30.658, 17.30.702, 17.30.705, 17.30.706, 17.30.708, 17.30.715, 17.30.716, 17.30.1001, 17.30.1006, 17.30.1007, 17.36.331, 17.36.335, 17.36.336, 17.36.345, 17.55.102, 17.55.111, 17.56.507, and Department Circular WQB-7.

**LIST OF AFFECTED RULES**

ARM 17.30.502, 17.30.516, 17.30.602, 17.30.607, 17.30.608, 17.30.610, 17.30.615, 17.30.619 through 17.30.629, 17.30.635, 17.30.641, 17.30.645, 17.30.650 through 17.30.658, 17.30.702, 17.30.705, 17.30.706, 17.30.708, 17.30.715, 17.30.716, 17.30.1001, 17.30.1006, 17.30.1007, 17.36.331, 17.36.335, 17.36.336, 17.36.345, 17.55.102, 17.55.111, 17.56.507, and Department Circular WQB-7.

**AFFECTED PARTIES SUMMARY**

The proposed changes to some of the numeric water quality standards could affect parties that will be renewing or receiving a new MPDES permit for surface or ground waters.

The clarification of the surface water quality standards and stream classifications and the introduction and footnotes of WQB-7 (DEQ-7) will benefit all affected parties.

**SCOPE OF PROPOSED PROCEEDING**

The Department requests that the Board initiate rulemaking to adopt New Rules I and II and amend ARM 17.30.502, 17.30.516, 17.30.602, 17.30.607, 17.30.608, 17.30.610, 17.30.615, 17.30.619 through 17.30.629, 17.30.635, 17.30.641, 17.30.645, 17.30.650 through 17.30.658, 17.30.702, 17.30.705, 17.30.706, 17.30.708, 17.30.715, 17.30.716, 17.30.1001, 17.30.1006, 17.30.1007, 17.36.331, 17.36.335, 17.36.336, 17.36.345, 17.55.102, 17.55.111, 17.56.507, and Department Circular WQB-7 and assign a hearings officer to preside over a public hearing.

**BACKGROUND**

Both the CWA and Montana's Water Quality Act require the Board to review and, if appropriate, revise the State's water quality standards and stream classifications at least once in three years. In recognition of this duty, the Department undertook a comprehensive review of Montana's rules establishing water quality standards. Based upon the Department's review the proposed rulemaking consists of revisions to the State's water quality rules, as follows: (1) revisions and updates to Department Circular WQB-7, entitled "Montana's Numeric Water Quality Standards"; (2) revisions and updates to ARM 17.30.601-670, which contains Montana's stream classifications and classification-specific water quality standards; (3) revisions to correct an error in the Mixing Zone Rules; (4) corrections to the Nondegradation Rules; (5) updates to the Groundwater Rules; and (6) updates to other rules that reference WQB-7. The Department is proposing these revisions to assist the Board in performing its triennial review of water quality standards required by both state and federal law.

The Department has notified the parties on the Department's WQB-7 interest persons list (about 800) of the proposed changes by a postcard mailing and held two informal public meetings to discuss the proposed changes to WQB-7. The Water Pollution Control Advisory Council (WPCAC) discussed the proposed changes to WQB-7 and water quality

standards rules at its last two meetings. The WPCAC at its 25 August meeting recommended that the Department proceed and request the Board to initiate this rulemaking.

## **I. PROPOSED REVISIONS TO DEPARTMENT CIRCULAR WQB-7**

(1) The Department is proposing to change the title of "Circular WQB-7" to "Circular DEQ-7". The change is intended to make the title consistent with other DEQ circulars.

(2) The introduction and footnotes in DEQ-7 have been generally revised for better readability. There are no substantive changes in these revisions

(3) The Department is proposing that the Board revise certain water quality standards to reflect changes made in the water quality criteria published by the U.S. Environmental Protection Agency (EPA) under § 304 of the Clean Water Act. In 2002, EPA revised its methodology for developing human health water quality criteria pursuant to § 304 by applying a revised freshwater fish consumption rate of 17.5 grams/day. In 2002, EPA published a list of recalculated national recommended water quality criteria (NRWQC) based upon the new consumption rate and, for some parameters, included a relative source contribution (RSC) factor obtained from the Safe Drinking Water Act's primary drinking water standards or new cancer potency information. 68 Fed. Reg. pp.75507-75515 (2003). States are now required to either adopt water quality standards based on EPA's revised fish consumption rate or adopt standards using a state-specific fish consumption rate. The proposed changes to WQB-7 are based on the NRWQC published in EPA-822-R-02-047, November 2002.

(4) The Board is proposing to change the human health standard for bacteria, which has been adopted for the various stream classifications in Title 17, Chapter 30, Sub-chapter 6 and for ground water in WQB-7. The Board is proposing to change the standard from fecal coliform (or coliform group) to *Escherichia coli* (E-coli) in response to current EPA recommendations. EPA is recommending that states adopt human health standards for bacteria expressed in terms of E-coli or an equivalent indicator, because E-coli is considered a better indicator of potential adverse health effects than fecal coliform. The Board is proposing to make the change recommended by EPA in order to be consistent with EPA's current guidance

(5) The Department is proposing to revise the groundwater human health standard for six Polycyclic Aromatic Hydrocarbons (PAH) to be consistent with EPA's guidance, "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons" (EPA/600/R-93/089). The revisions are based upon applying the relative potency factors for Benz[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene and Indeno[1,2,3-cd]pyrene (Table 8) to the 2004 Drinking Water Health Advisory criteria for Benzo[a]Pyrene. At this time, since EPA has not published individual Health Advisory criteria for the six PAH compounds listed above, the Department is proposing these changes to be consistent with current EPA guidance. The use of the relative potency factors and the EPA citation is in Footnote No.30 of WQB-7.

(6) The Department is proposing to revise the State's current human health standard for arsenic (18 mg/L) in both surface water and groundwater in order to reflect EPA's maximum contaminant level (MCL) for arsenic (10 mg/L). EPA's MCL for arsenic will take effect on January 23, 2006. The Department is proposing that Montana's revised arsenic standard of 10 mg/L become effective on that same date in order to meet the requirements of § 75-5-301(2)(b)(i), MCA. Footnote 29 in DEQ-7 contains the revised standard and its effective date.

(7) The Department is proposing to change the manner in which certain aquatic life standards are listed in WQB-7. Currently, some standards are displayed at a hardness value of 50 mg/L while others are displayed using a hardness value of 100 mg/L. The Department is proposing to list all aquatic life standards that are affected by hardness at a value of 25 mg/L. The hardness value of 25 mg/L represents the most stringent value for each metal. The Department is proposing this change only for purposes of displaying parameters at the same hardness value within WQB-7. The coefficients and manner of calculating site-specific standards based on hardness for these parameters is not being changed.

(8) The Required Reporting Value (RRV) for about 20 parameters has been updated to reflect current analytical methodologies. In some cases, the existing RRV is greater than the standard. The RRV is intended to ensure data reported to the Department for permit compliance, ambient monitoring and restoration under state "super fund" and Total

Maximum Daily Load (TMDL) is consistent and at a level where informed decisions can be made. The definition of RRV has been clarified and made consistent in WQB-7 footnotes and Nondegradation Rule, ARM 17.30.702(22).

(9) The Department is proposing to update the method for expressing Dioxin and congeners as an equivalent concentration of 2,3,7,8 TCDD to the EPA preferred method commonly referred to as the World Health Organization (WHO) TEF method (van den Berg, M; Bosveld, ATC: et al. (1998), Toxicity equivalency factors (TEFs) for PCBs, PCDDs, PCDFs for humans and wildlife. (Environ Health Perspect 106(12):775-792). The Department is also proposing revisions that would allow the use of specific low detection limit analysis methods and Required Reporting Values on a case-by-case basis with prior Department approval.

## **II. PROPOSED REVISIONS TO ARM TITLE 17, CHAPTER 30, SUBCHAPTERS 5, 6, 7**

(1) The Department is revising the formula used to calculate the size of a mixing zone because the formula contains an error. The Department's proposed correction to the formula in ARM 17.30.516(4) is consistent with EPA mixing zone guidance.

(2) As part of the triennial review, the Department conducted a detailed review of ARM Title 17, Chapter 30, Subchapter 6, which contains the State's stream classifications and classification-specific numeric water quality standards. The Department is proposing changes to those rules for purposes of updating material that has been incorporated by reference, clarifying portions of the rules, and correcting certain latitude/longitude coordinates for some of the stream classifications.

(3) The Department is proposing revisions to the stream classification rules in order to remove language that conflicts with statutory requirements for adopting site-specific standards and to clarify that the standards in WQB-7 apply to all state surface waters, except Class I.

(4) The Department is proposing that a definition of "Outstanding Resource Waters" (ORW) be added to the definitions in the State's stream classifications rules (ARM 17.30.602). The Department is further proposing that the existing definition of ORWs in the nondegradation rules be amended to be consistent with the statutory definition and with the new definition in ARM 17.30.602.

(5) The Department is proposing to delete subsection (3) of ARM 17.30.706, because the requirements under that subsection are no longer necessary to ensure that discharges of coal bed methane wastewater comply with Montana's nondegradation requirements. After adoption of subsection (3), the Ninth Circuit clarified that discharges of coal bed methane water are subject to the Montana Pollutant Discharge Elimination System permit requirements, which include compliance with Montana's water quality standards and nondegradation requirements. Therefore, requiring a separate nondegradation review under ARM 17.30.706(3) is not necessary. The Department is also amending ARM 17.30.706 to provide the Department the authority to require the information described in the rule for purposes of determining nonsignificance when issuing MPDES permits.

(6) The Department is proposing New Rule I to notify the public that certain surface waters have been designated Outstanding Resource Waters by statute and that other waters may be designated as Outstanding Resource Waters in the future following the procedures in § 75-5-316 MCA.

(7) The Department is proposing New Rule II, which sets forth the statutory prohibitions that apply to waters that are designated as Outstanding Resource Waters.

## **II. PROPOSED REVISION OF RULES INCORPORATING WQB-7 BY REFERENCE**

(1) The Department is proposing to amend ARM Title 17, Chapter 30, Subchapters 5, 6, 7, and 10; Chapter 36, Subchapter 3; Chapter 55, Subchapter 1; and Chapter 56, Subchapter 5 in order to incorporate by reference the proposed amendments to WQB-7.

### **Hearing Information**

The Department requests the Board appoint a hearings officer to conduct a public hearing.

**BOARD OPTIONS**

The Board may:

1. Authorize the Department to initiate rulemaking and issue the attached Notice of Public Hearing on Proposed Amendment and Adoption,
2. Modify the Notice of Public Hearing on Proposed Amendment and Adoption and initiate rulemaking thereafter; or
3. Deny the Department's request to initiate rulemaking.

**DEQ RECOMMENDATION**

The Department recommends that the Board grant the Department's request to initiate rulemaking and schedule a hearing.

**ENCLOSURES**

The following information is attached to this summary:

- 1) Draft Notice of Public Hearing on Proposed Amendment and Adoption.
- 2) Proposed amendments to Department Circular WQB-7 (renamed DEQ-7).